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PATENT
Customer No. 39,878
Attorney Docket No. 7033.0009-01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
Robert A. NORWOOD)	Group Art Unit: 1755
Application No.: 10/762,248)	Examiner: Not Yet Assigned
Filed: January 23, 2004)	
For: POLYMER BLENDS FOR)	
OPTICAL AMPLIFICATION)	

OFFICIAL

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), applicant brings to the attention of the Examiner the documents listed on the attached PTO 1449. This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced application.

Copies of the listed documents were previously submitted in prior applications, application no. 09/722,282, filed November 28, 2000, and application no. 09/507,582, filed February 18, 2000, issued as U.S. Patent No. 6,292,292, upon which applicant relies for the benefits provided in 35 U.S.C. § 120. Applicant respectfully requests that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and applicant(s) determine(s) that the cited document(s) do not constitute "prior art" under United States law, applicant reserves the right to present to the office the relevant facts and law regarding the appropriate status of such documents.


Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

MIN, HSIEH & HACK LLP

Dated: July 29, 2004

By: 
Timothy M. Hsieh
Reg. No. 42,672

OMB No. 0651-0011

INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Atty. Docket No. 07033.0009-01				Serial No. 10/762,248			
Applicant Robert A. NORWOOD et al.							
Filing Date January 23, 2004				Group: 1755			
U.S. PATENT DOCUMENTS							
Examiner Initial*		Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate
		2,346,155	04/11/44	Denison et al.			
		3,197,436	07/27/65	Block et al.			
		3,725,574	09/27/66	Saraceno et al.			
		3,432,532	03/11/69	King			
		3,997,853	12/14/76	Morris et al.			
		4,037,172	07/19/77	Filipescu et al.			
		4,139,342	02/13/79	Sheldrake et al.			
		4,272,733	06/09/81	Walling et al.			
		RE 31,057	10/12/82	Morris et al.			
		4,780,877	10/25/88	Snitzer			
		4,811,349	03/07/89	Payne et al.			
FOREIGN PATENT DOCUMENTS							
		Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
		0 556 005 A1	8/93	Europe			
		PCT/EP92/02913	7/93	PCT			
		EP 0 989 693	3/29/00	Europe			
		EP 0 775 673	5/28/97	Europe			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
	"Preparation and Fluorescence Properties of Sm-Containing Copolymers," Zhang et al., Department of Materials Science and Engineering, University of Science and Technology of China, Hefe 230026, October 1992, Vol. 6, No. 5, pp. 435-438.						
	"Synthesis and Crystal Structures of (Pr[C2H5O)2POO]3)n," Huang et al., Chinese Chemical Letters, Vol. 3, No. 11, pp. 947-950, 1992.						
Examiner				Date Considered			
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							
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		4,800,295	08/22/89	Byer et al.			
		5,005,175	04/04/91	Desurvire et al.			
		5,032,315	07/16/91	Hayden et al.			
		5,093,147	03/03/92	Andrus et al.			
		5,105,434	04/14/92	Krupke et al.			
		5,140,658	08/18/92	Sunshine			
		5,282,260	01/25/94	Buchal et al.			
		5,287,217	02/15/94	Cockroft			
		5,301,054	04/05/94	Huber et al.			
		5,379,149	01/03/95	Snitzer et al.			
		5,524,016	06/04/96	Pappalardo et al.			
FOREIGN PATENT DOCUMENTS							
		Document Number	Date		Class	Sub Class	Translation Yes or No
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
		"A Proposal for Positive Cooperativity in Anion-Cation Binding in Yttrium and Lutetium Complexes Based on o-Amino-Substituted Phenolate Ligands on the Way to Coordination Polymers by Self-Assembly. Molecular Structures of [ClLu(OAr) ₃]Na] (X-ray) and [ClY(OAr) ₃ Y(OAr) ₃ Na (X-ray and 89Y-NMR): Hogerheide et al; Inorganic Chemistry, Vol. 35, No. 5, 1996, 35, 1185-1194.					
		"Inorganic Coordination Polymer Chromium (III) TrisOphosphinates), Nannelli et al., Technological Center, Pennwalt Corporation, John Wiley & Sons, Inc., 1973, 2691-2701.					
		"Luminescence and IR Spectroscopy of Europium (III) Complexes with New Organophosphorus Ligands," Bel'tyukova et al., A.V. Bogal'skii Physical Chemistry Institute, Academy of Sciences of the Ukrainian SSR, Institute of Radio Engineering and Electronic, Academy of Sciences of the USSR. Translated from Koordinatsionnaya Khimiya, Vol. 15, No. 6, pp. 848-852, June, 1989. Original article submitted June 16, 1987.					
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	5,555,342	09/10/96	Buchal et al.			
	5,694,500	12/02/97	Page et al.			
	5,726,796	03/10/98	Regener et al.			
	5,364,819	11/1994	Dexter et al.			
	5,338,607	08/16/1994	Kawamoto et al.			
	4,962,995	10/1990	Andrews et al.			
	4,225,459	09/1980	Faulstick et al.			
	5,755,998	05/1998	Yamazak et al.			
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	5-238775	09/1993	Japan			
	59-116149	07/1984	Japan			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)						
	"Synthesis, Characterization and Fluorescence Properties of Europium(3+) and terbium (3+) Bipyridyl Complex Containing Ion Polymers," Zhu et al., Polymer Research Institute, Polytechnic of New York, pp. 78-83.					
	"Synthesis and Optical Properties of New Inorganic Phosphate Matrices," Lou et al., Journal of Sol-Gel Science and Technology, 2, 787-789 (1994)					
	"Crystal Structure of Tris(dimethoxyphosphato) Lanthanum (III) Coordination Polymer {La[PO ₂ (OCH ₃) ₂] ₃ } _n ," Fu et al., Chinese J. Struct. Chem., Vol. 13, No. 1, pp. 24-47.					
	"Synthesis and Properties of Dimethylsulfoxide Complexes," Zinner et al., An. Acad. Brasil. Clinic, (1986) 58 (2), pp. 183-187.					
	"Synthesis, Characterization and Applications of Rare Earth Metal ion Chelating Polymers," Okamoto et al., Polytechnic Institute of New York, Department of Chemistry and Polymer Research Institute, pp. 425-450.					
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	3,440,180	4/69	Rose			
	3,457,195	7/69	Block et al.			
	3,654,189	4/72	Venezky et al.			
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	"Rare-Earth-Metal-Containing Polymers, 5, Synthesis, Characterization, and Fluorescence Properties of Eu ³⁺ +Polymer Complexes Containing Carboxylbenzoyl and Carboxynaphthoyl Ligands," Ueba et al., Journal of Polymer Science, Polymer Chemistry Edition, Vol. 20, 1271-1278 (1982).					
	"Rare Earth Metal Containing Polymers, 4, Energy Transfer from Uranyl to Europium Ions in Ionomers," Okamoto et al., Macromolecules, 1981, 14, 807-809.					
	"Rare Earth Metal Containing Polymers, 3, Characterization of Ion-Containing Polymer Structures Using Rare Earth Metal Fluorescence Probes," Okamoto et al., Macromolecules 1981, 14, 17-22					
	"Investigation on the Synthesis and Characterization of Rare Earth Metal-Containing Polymers, II, Fluorescence Properties of Eu ³⁺ +Polymer Complexes Containing Beta-Diketone Ligand," Ueba et al., Journal of Applied Polymer Science, Vol. 25, 2007-2017 (1980)					
	"Synthesis and Characterization of Rare Earth Metal-Containing Polymers, I. Fluorescent Properties of Ionomers Containing Dy ³⁺ , Er ³⁺ , Eu ³⁺ , and Sm ³⁺ , Banks et al., Journal of Applied Polymer Science, Vol. 25, 359-368 (1980).					
	"Solid Polymers Doped with Rare Earth Metal Compounds, III. Formation and Stability of Macromolecular Complexes Comprising Neodymium Nitrate and Dipivaloylmethane in Poly(Ethylene Oxide)," Twomey et al. Journal of Polymer Science: Part B: Polymer Physics, Vol. 32, 551-560 (1984).					
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		4,078,010	3/78	Kramer			
		5,614,596	3/97	Laine et al.			
		5,690,863	11/97	Schuman			
		5,759,448	6/98	Katono et al.			
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		Document Number	Date		Class	Sub Class	Translation Yes or No
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		"Inorganic Coordination Polymers, XVIII, Observations on Brittle and Flexible Films of [Cr(OP(CH ₃)(C ₆ H ₅)O) ₂ (OP(C ₈ H ₁₇) ₂ O)] _x " Nannelli et al., Journal of Polymer Science: Polymer Chemistry Edition, Vol. 13, 2849-2856 (1975)					
		"Polymeric Metal Phosphinates," Inorganic Macromolecules Review, 1 (1970) 115-125					
		"Solid Polymers Doped with Rare Earth Metal Salts, I, Complex Formation and Morphology in the Neodymium Chloride - Poly (Ethylene Oxide) System," Twomey et al., Journal of Polymer Science: Part B: Polymer Physics, Vol. 29, 859-865 (1991).					
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		"A Study of Neodymium-Chelate-Doped Optical Polymer Waveguides," Lin et al., J. Appl. Phys. 79 (6), 15 March 1996, pp. 2868-2874.					
		"Properties of Some Europium Laser Chelates Derived from Benzoyltrifluoroacetone," Charles et al., J. Inorg. Nucl. Chem., 1966, Vol. 28, pp. 3005-3018.					
		"Spectroscopy of Dy ³⁺ in Ge-Ga-S glass and its suitability for 1.3-um fiber-optical amplifier application," Wei et al., OPTICS LETTERS/Vol. 19, No. 12/June 15, 1994, pp. 904-905.					
		"Effects of Chromophore Dissociation on the Optical Properties of Rare-Earth-Doped Polymers," Gao et al., APPLIED OPTICS, Vol. 37, No. 30/20, October 1998, pp. 7100-7106.					
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		5,822,469	10/98	Hale			
		6,292,292	9/01	Garito et al.			
		6,538,805	3/03	Norwood et al.			
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		"Systems Evaluation of an ER3+-Doped Planar Waveguide Amplifier," Nykolak et al., IEEE Technology Letters, Vol. 5, No. 10, October 1993, pp. 1185-1187.					
		"Erbium-Doped Glasses for Fiber Amplifiers at 1500 nm," William J. Miniscalco, Journal of Lightwave Technology, Vol. 9, No. 2, February 1991, pp. 234-250					
		"Effects of Concentration on the Performance of Erbium-Doped Fiber Amplifiers," Myslinski et al., Journal of Lightwave Technology, Vol. 15, No. 1, January 1997, pp. 112-120					
		"Performance of High Concentration Erbium-Doped Fiber Amplifiers," Myslinski et al., IEEE Photonics Technology Letters, Vol. 11, No. 8, August 1999, pp. 973-975.					
		"All Light Now Fibre Amplifiers and Their Impact on Telecoms," IEE Review, January 1991, pp. 35-39					
		"Fibre Amplifier Comes Ashore," Dettmer, IEE Review May 1994.					
		"The Golden Age of Optical Fiber Amplifiers," Desurvire, PHYSICS TODAY, January 1994, pp. 20-27.					
		"Inorganic Coordination Polymers—XIII[1]. The Preparation and Characterization of Some μ -Halobis(μ -Phosphinato)-Chromium(III) Polymers," T.L.D. Gillman et al., J. inorg. nucl. Chem. 1973, Vol. 35, pp. 4053-4059.					
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		"Inorganic Coordination Polymers. XI. A New Family of Chromium (III) Bis(phosphinate) Polymers, [Cr(OH)(OPRR'O) ₂] _x , P. Nannelli et al., Journal of Polymer Science: Part A-1, Vol. 9, 3027-3038 (1971).					
		"Disassociation Constants for Polyfluoro of Phosphorus in Various Media," G. Matveeva et al., Akad. Nank, SSR. Ser. Klaim, 1982, 1491, pp. 1329-1335.					
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